



Figure 3 - RUNWAY END PROTECTION AREAS



NOTE: The Notation showing the Runways on this appendix is illustrative only.
It is not intended to show precise details of the runways

Figure 4 - REQUIREMENTS FOR NON-AERONAUTICAL GROUND LIGHTS

Appendix 2C - Auckland International Airport: Restrictions Relating to Runway End Protection Areas

The Runway End Protection Areas (REPAs) shown on Figure 3 in Appendix 2C.1 to this designation, are areas off the ends of both the existing and proposed second runways which are required to be free of obstructions or activities which could interfere with aeronautical navigational aids. The areas of the REPAs as required for operational purposes are also areas in which, statistically, there are greater chances of aircraft related accidents. It is considered desirable that the public's exposure to such risks be reduced by limiting the range of activities permitted in the REPAs. The following requirements for REPAs are intended to achieve both objectives which, to a large extent, are compatible.

The requirements for REPAs detailed in this section are based on the Federal Aviation Administration (FAA) Office of Airport Standards (Washington, DC, USA) Advisory Circular 150/5300-13 Airport Design and the Civil Aviation Authority (CAA) of New Zealand Advisory Circular AC139-06A Aerodrome Design – Aeroplanes Above 5700kg MCTOW.

The REPAs comprise fan-shaped areas plus a rectangular area which extends beyond the fan along the extended runway centre-line. The fan-shaped areas commence at the ends of the runway strips (defined in the Specification for Obstacle Limitation Surfaces) and extend equidistant about the extended runway centre-line to a point 750 metres from the end of the runway strips. The width of the fan at this point is 525 metres. The rectangular areas then extend beyond the fans and equidistant about the extended runway centre-lines, for a further 540 metres. The width of the rectangular areas is 120 metres.

All buildings, except those required for aviation purposes, are prohibited within the REPAs. For the purpose of this section, the word “building” shall have the meaning assigned to it in the Building Act 2004, except that the exclusions listed under Section 9(a), (ab), (ac), (b), (c), (f), (g), (h), (i) & (j) of that Act shall not apply and those objects shall be considered to be buildings. Any buildings erected in the REPA for the proposed second runway shall be removed, unless the building has the written approval of Auckland International Airport Limited under section 176(b) of the Resource Management Act 1991.

In addition to buildings, all activities within the REPAs which generate or have the potential to generate any of the following effects are prohibited:

- mass assembly of people
- release of any substance which would impair visibility or otherwise interfere with the operation of aircraft including the creation of smoke, dust and steam
- concentration of dangerous substances
- production of direct light beams or reflective glare which could interfere with the vision of a pilot
- production of radio or electrical interference which could affect aircraft communications or navigational equipment
- attraction of birds

Appendix 2C - Auckland International Airport: Requirements for Non- Aeronautical Ground Lights Adjacent to Extended Runway Centre Lines

CAA Advisory Circular AC139-6 requires that any non-aeronautical ground light which, by reason of its intensity, configuration or colour, might cause confusion or prevent the clear interpretation of aeronautical ground lights, should be extinguished, screened or otherwise modified so as to eliminate such a possibility. For Auckland International Airport, this requirement currently applies to the Existing Runway only in advance of the Northern Runway becoming operational a similar requirement will need to be introduced for that runway. The current requirement applies over a rectangular area, 1500 metres wide, extending equidistant either side of the extended runway centre-line for a distance of 4440 metres from the end of the runway strip (as defined in the Specification for Obstacle Limitation Surfaces). This area is shown in Figure 4 in Appendix 2C.2 to this designation.

For ease of administration, Auckland International Airport Limited requires that any light in the above area be prohibited from shining above the horizontal.